EXHIBIT J

HIGHLY CONFIDENTIAL – FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF WISCONSIN

SILICON GRAPHICS, INC.	:	
Plaintiff,	:	Civil Action No. 06-C-0611-C
v.	:	
ATI TECHNOLOGIES, INC. ATI TECHNOLOGIES ULC and ADVANCED MICRO DEVICES, INC.,	:	
Defendants.	:	

DEPOSITION DIGEST TRANSCRIPTS

Plaintiff Silicon Graphics, Inc. ("SGI") hereby submits the following Deposition Designation Transcript for those portions of the depositions of Robert Drebin, Mark Leather, Danny Loh and Mark Peercy played in live court on February 7-8, 2008.

Dated: February 11, 2008

Respectfully submitted,

/s/ Philip L. Hirschhorn
Edward J. Pardon
Jeffrey S. Ward
MICHAEL BEST & FRIEDRICH LLP
One South Pinckney Street, Suite 700
Madison, WI 53703-4257
(608) 257-3501
(608) 283-2275 (Fax)

EXHIBIT J

Of counsel:

James M. Bollinger
Philip L. Hirschhorn
David W. Marston Jr.
Steven Underwood
Jennifer L. Dereka
MORGAN, LEWIS & BOCKIUS LLP
101 Park Avenue
New York, NY 10178
(212) 309-6000
(212) 309-6001 (Fax)

Attorneys for Plaintiff Silicon Graphics, Inc.

Case Clip(s) Detailed Report
Thursday, February 07, 2008, 9:49:34 PM

SGI v ATI - Trial

PEERCY, MARK S. (Vol. 01) - 05/18/2007

1 CLIP (RUNNING 00:16:57.700)

Invalidty no obj

MP-* 14 SEGMENTS (RUNNING 00:16:57.700)

1. PAGE 18:12 TO 18:18 (RUNNING 00:00:23.100)

Q Why did you join Silicon Graphics in 1994?
A Because I was very enthusiastic about working in 3D rendering and realtime rendering.
Q Certainly there were other companies that did that. Why did you pick Silicon Graphics?
A Silicon Graphics was at its peak and a very exciting opportunity.

2. PAGE 18:19 TO 18:24 (RUNNING 00:00:09.900)

Q Did you receive offers from other companies to work in 3D rendering?
A I did not.
Q Did you seek offers from anybody else in 3D rendering?
A I did not.

3. PAGE 20:01 TO 20:09 (RUNNING 00:00:27.800)

Q You said that Silicon Graphics was at its peak when you joined. Did you understand at that time when you joined Silicon Graphics that they were the state of the art -- had the state of the art technology in 3D rendering?
A I did.
Q And was that one of the reasons you chose to work at Silicon Graphics?
A It is.

4. PAGE 64:02 TO 64:22 (RUNNING 00:01:30.500)

Q I'd like to talk a little bit about the work that led up to the '327 patent, and I think we discussed it briefly as coming out of the Bali project. Do you recall that?
A I do recall that.
Q And specifically, do you recall discussions early on about enhancing shading as it was implemented in the InfiniteReality with John Airey?
A I do.
Q What do you recall about those discussions?
A We had a number of technology demonstrations that rode on InfiniteReality as a platform that demonstrated the potential advantage of programmable shading. And we recognized the deficiencies of the InfiniteReality hardware specifically in enabling us to do the kinds of things that we were investigating.
Q And specifically, that related to the use of fixed point formats through -- in the rasterization in the framebuffer?
A It had to do with use of fixed point in certain portions of the InfiniteReality pipeline.

5. PAGE 65:04 TO 65:19 (RUNNING 00:01:14.000)

Q Do you recall any sort of specific discussion of the need to have floating point pixel values stored in a

framebuffer, as you define it, in your work on Bali?
A I do.
Q And what was the importance of having floating point values in a framebuffer for Bali?
A So the hardware that SGI was designing was an implementation of the OpenGL standard, and the OpenGL pipeline has a specific architecture. And as a result, it itself imposes constraints on where data can be brought into the system and where data can be sent out of the system. One of our objectives in the development of our technology was to minimize the change that would need to happen between a graphics architecture, such as InfiniteReality, in order to support programmable shading, and those fed into the Bali discussion.

6. PAGE 65:20 TO 65:25 (RUNNING 00:00:14.900)

Q Okay. The idea that if you -- strike that.
In programmable shaders as you were working on at that time, were pixel values stored in a framebuffer recycled through the pipeline?
A At the time?
Q Yes.

7. PAGE 66:01 TO 66:15 (RUNNING 00:00:41.200)

A Our implementation recycled pixel values through the graphics pipeline.
Q And they would come from the framebuffer in floating point format?
A Could you clarify whether we're talking InfiniteReality experiments or --
Q No. I'm talking about the work you did on Bali.
A So the work that we did on Bali. So our work primarily was on OpenGL software simulators --
Q Right.
A -- which would have been implemented in hardware by the Bali hardware team. In the OpenGL software simulators, we extended what the OpenGL pipeline describes as the framebuffer to support floating point values.

8. PAGE 69:10 TO 69:12 (RUNNING 00:00:22.700)

Q Let me ask it the way I asked it, though. Were you proponents of moving to a full floating point graphics pipeline as described in the '327 patent?

9. PAGE 69:14 TO 71:25 (RUNNING 00:03:38.000)

THE WITNESS: So John Airey and I extended the OpenGL architecture by introducing floating points -- floating point at different points in the OpenGL pipeline. Bali was a hardware implementation of the OpenGL architecture that we had designed. And so to the extent that Bali reflected the OpenGL architecture that we were working on, we were proponents of introducing floating point in the texture unit, in other portions of the graphics pipeline.
MR. BOLLINGER: Q. What other portions of the graphics pipeline were you proponents of introducing floating point format?
A So we chose to -- in our implementation chose to extend the framebuffer, where framebuffer is defined as that portion of memory that is scanned out for display, to hold floating point. We also suggested introducing floating point in the scan converter, which takes color values from vertices on a triangle and scan-converts them to pixels, as well as the texture unit.

Q You were proponents of doing those parts of the rasterization process in floating point?
A We were.
Q And you were proponents of storing data, pixel data, in the framebuffer; is that correct?
A That's correct.
Q And you were also proponents of pulling pixel data stored in the framebuffer and recycling it?
A We were.
Q And that data being in floating point format?
A In our implementation, yes, that data was in floating point format.
Q And you did that in full software emulation?
A We did.
Q And what were the advantages when you did it that way?
A The primary advantage is that when you took one pass through the graphics pipeline --
00071:01 Q Right.
A -- you could preserve all of the information or the bulk of the information that had been computed during that pass in order to use it later.
What this enables is the ability outside the graphics pipeline to dissect a particular operation into component pieces, each of which could be executed on the graphics pipeline so that an application could work at a much higher level of abstraction.
Q By using floating point data for storage of pixel values in the framebuffer, do you avoid clamping and loss of precision and range associated with values as they go through the pipeline and when you recycle those values?
A Yes.
Q And that's a benefit?
A That is a benefit.
Q And were you able to demonstrate that benefit when you did that work on the Bali project?
A We were able to demonstrate that benefit in the software --
Q Simulator?
A -- simulator. And to the extent that the software simulator was encoded in the hardware, that benefit would carry over.

10. PAGE 105:18 TO 106:02 (RUNNING 00:01:03.300)

MR. BOLLINGER: Q. Do you recall the simulator simulating a floating point framebuffer?
A I do.
Q Do you know who added that to the simulator, that capability?
A I don't recall for certain.
Q Do you recall when that work was done?
A Not specifically, although it would have been at
00106:01 the earliest at the end of '96 to '97 to '98 kind of
02 time frame.

11. PAGE 109:25 TO 111:20 (RUNNING 00:02:36.300)

Q And at some point, do you recall that it had been
00110:01 canceled?
A I recall that it was canceled.
Q Do you know why it was canceled?
A I do.
Q I'm sorry?
A I do.
Q What was the reason that you understood?
A My understanding is that the product was not going

to be deliverable.
Q And who did you gain that understanding from?
A It came, in part, from my own assessment as feedback to the team.
Q How far along had the product developed by the time they decided to cancel it?
A I believe that it was in simulation phase, so that at least some portions of the system could be simulated.
Q When you say simulation phase, do you mean -- what do you mean precisely?
A So the way that we developed the chips at SGI was to write simulators in programming language such as C so that you could provide stimulus to the system and see how it might perform before you chose to what's known as tape it out, which is deliver the chips and have them produced.
Q Do you know whether these simulations had been run for more than -- strike that.
Which chips had been simulated at the time that it had been canceled; do you know?
A I do not know for certain.
Q What is your understanding as you sit here today?
A So my understanding is that some functionality in all of the chips would need to have been simulated.
Q My question is how much had that been already done? Do you know whether the functionality for the R Chip had been fully simulated?
A So that I don't know.
Q Do you know whether the function for the G Chip had been fully simulated?
A I don't know.
Q Or the N Chip?
A (Witness shakes head.)
Q Or the M Chip?
A I don't know.
Q So it could have been that all the simulations had been completed, you don't know at this point?

12. PAGE 111:23 TO 113:20 (RUNNING 00:03:45.200)

THE WITNESS: That could have been true.
MR. BOLLINGER: Q. And do you know the results of any of the simulations that were run on the chips?
A I don't recall specifically.
Q Did anybody tell you that the product could not -- was not deliverable?
A So I had conversations which tried to determine whether we were converging from an engineering standpoint on delivery of the product.
Q And who were those conversations with?
A I recall a conversation with Brian Cabral.
Q What was -- What do you recall about his assessment?
A I recall we shared a concern for the challenge that the team was facing delivering the product.
Q And what in particular -- what aspect of the product was causing the challenge?
A My belief is that the product was not rescoped when the skill set of the team changed, when people on the team, important people on the team, were leaving the project.
Q When you say rescoped, what did you mean? Scaled back?
A So a team can deliver -- a given team has the capability to deliver a certain device. And if you have more skilled people, you might be able to deliver a

grander device. So scaled back is one option, for example, for dealing with the change in the team.
Q And at the time that the product had -- the Bali project had been canceled, there was a substantial exodus of graphics engineers from Silicon Graphics?
A Yes.
Q People like Mr. Buchner, Mr. Drebin had departed.
A Yes.
Q Mr. Leather, I think, had left by that time, too?
A Yes.
Q Gordon Elders, he had gone by then?
A I don't recall Gordon's specific time of departure.
Q Mr. Montrym had departed by then, too?
A Yes.
Q Mark Grossman, was he gone, also?
A I believe so.
Q Do you know whether Mr. Loh was still there at that point or not?
A I don't know for certain.
Q How about Mr. Baum?
A I believe Mr. Baum had departed.

13. PAGE 113:21 TO 113:25 (RUNNING 00:00:17.100)

Q We mentioned a little bit about the simulated framebuffer. Were you aware of any other work at SGI on a simulated framebuffer other than the one that you did? The simulated floating point framebuffer?
A No.

14. PAGE 114:01 TO 114:08 (RUNNING 00:00:33.700)

Q In the demise of Bali, did you disagree with the decision?
A No.
Q Were you disappointed by the decision?
A Yes.
Q Did you and Dr. Airey have different views on whether the decision to cancel Bali was the right one?
A I don't know.

TOTAL: 1 CLIP FROM 1 DEPOSITION (RUNNING 00:16:57.700)

Case Clip(s) Detailed Report
Thursday, February 07, 2008, 9:31:39 PM

SGI v ATI - Trial

DREBIN, ROBERT (Vol. 01) - 03/21/2007

1 CLIP (RUNNING 00:08:19.200)

invalidity

3 SEGMENTS (RUNNING 00:08:19.200)

1. PAGE 122:15 TO 123:11 (RUNNING 00:01:44.900)

Q. Okay. And do you recall any other ideas or projects or anything that you worked with Mark Peercy on?
A. I think pertaining to this patent, that we had a discussion on high dynamic range.
Q. High dynamic range. All right. Why does that pertain to this patent; when you say "this patent," you mean the '327 patent?
A. Let me get the right -- yes.
Q. Okay. What do you recall about that discussion?
A. I recall discussing Greg Ward's work on high dynamic range in his radiance package.
Q. And you remember discussing that with who?
A. I believe I had a discussion with Mark Peercy and I believe John Airey on that subject.
Q. And when did this discussion take place; do you have any idea?
A. I don't remember.
Q. It was while you were an employee of Silicon Graphics, right?
A. Yes.

2. PAGE 124:22 TO 127:04 (RUNNING 00:03:48.800)

Q. All right. Is there anything else you can tell me about that conversation other than the fact that the three of you discussed Greg Ward's paper and this color format?
A. I believe we had a discussion on his noted comments on the limitations or the -- you know, not limitations, but what he -- his observations on -- Greg Ward's observations on the format. And we had a discussion on what -- how many bits -- if you were in a different format, and I don't remember who, you know, I don't remember the starting thing because I don't really remember why -- how I became involved. But how many -- you know, Greg Ward made the observation that 8-bits of exponent was overkill for color.
Q. Okay. That's what Greg said in his paper.
A. Yes.
Q. And I'm asking you, what do you recall about the conversation?
A. So then what would be a -- I believe we discussed a format. What format in terms of what would be the right number of bits of exponent.
Q. For color?
A. For color.
Q. And what did you guys decide?
A. I believe -- I believe we came up with for a 16-bit word for lighting, that a 5-bit mantissa -- excuse me, a 5-bit exponent and an 11-bit exponent. Excuse me. 10-bit. Sorry. 10-bit mantissa, 5-bit exponent, would be a good tradeoff.
Q. And when you said "we came up with that," how

did you come up with that?
A. I don't remember.
Q. But it was during the discussions with John Airey and Mark Peercy that this concept came up?
A. I believe the concept came up during discussions with Mark Peercy and John Airey.
Q. With you being part of those conversations. Do you recall where the conversation took place?
A. At -- the conversation took place at SGI.
Q. Do you remember where at SGI?
A. I believe it was in Building 7. I'm not sure.
Q. I'm curious. Do you have any sort of particular specific recollection about where it took place?
A. I believe -- I have a vague recollection of a conference room.
Q. Do you have a recollection of who else was attending the meeting?
A. I thought it was -- I thought that discussion, which was an informal discussion, was those two.
Q. You don't know if anybody else was there or not?
A. I don't remember anyone else being there.
Q. Do you remember the context of the discussion
00127:01 any more than what you have just relayed to me, other than the fact that you were talking about Greg Ward's paper?
A. No.

3. PAGE 127:14 TO 129:02 (RUNNING 00:02:45.500)

Q. Well, my question is, were you discussing rasterization with John Airey and Mark Peercy in that conference room that day?
A. I don't believe so.
Q. Were you discussing storing data in a framebuffer?
A. I don't believe so.
Q. Were you discussing geometric process of data?
A. I don't believe so.
Q. It was merely a discussion about what format might be advantageous for color values?
A. I think I understand, I just want to make sure
00128:01 I heard the question.
Q. The discussion was on what would be an advantageous format for color values.
A. I believe the discussion was on a format or really a distribution. How much precision in range tradeoff would be best for high dynamic range.
Q. For color values.
A. For color values, yes.
Q. And instead of 8-bit for an exponent, you, John and Mark concluded 5-bit would be better?
A. No. Well, no, Greg Ward noted that 8-bits was overkill.
Q. Right.
A. And he was likely constrained to trying to work with -- since his product was a software renderer, it was an easy format to work in bytes. And so my recollection was discussing, when he made the observation, that I think he makes an observation that the brightness between the darkest thing we can see and the sun is some power of two. And I think that that was -- I think that came into the range where a 5-bit exponent was -- at least that's my memory of that.
Q. So the discussion was about a Ward paper that dealt with software rendering and the dynamic range that

25 he was commenting on in that paper?
00129:01 A. We were discussing the representation of
02 color. We weren't talking about a software renderer.

Leather, Mark (Vol. 01) - 12/07/2007

1 CLIP (RUNNING 00:05:58.100)

invalidity

ML-* 10 SEGMENTS (RUNNING 00:05:58.100)

1. PAGE 6:20 TO 6:25 (RUNNING 00:00:19.200)

20 And I would like you to start, if you
21 could for me, by giving me your full name and also
22 your current home address.
23 A. My full name is Mark Marriott Leather.
24 The home address is 265 Montclair Road, Los Gatos,
25 California.

2. PAGE 14:10 TO 14:18 (RUNNING 00:00:30.700)

10 Q. Okay. And so in 1989 you joined Silicon
11 Graphics. And how long did you work there?
12 A. Approximately eight years.
13 Q. So do you recall the date that you
14 departed Silicon Graphics?
15 A. I don't recall the exact date.
16 Q. It would have been approximately 1997 at
17 some point?
18 A. It was sometime in 1997.

3. PAGE 26:12 TO 26:21 (RUNNING 00:00:37.600)

12 Q. In designing rasterization circuits, is
13 there any way to simulate their performance before
14 tapeout?
15 A. Yes, there is.
16 Q. And how do you do that?
17 A. The RTL code that defines the logic can
18 be simulated.
19 Q. And that simulation is done on a computer
20 system?
21 A. Yes.

4. PAGE 27:02 TO 27:19 (RUNNING 00:01:10.700)

02 Q. And what was the purpose of doing the
03 simulations on a workstation?
04 A. The main purpose was for functional
05 completion.
06 Q. Was one of the purposes to confirm
07 that the design would perform effectively without
08 investing in the manufacturer of the dies for the
09 foundry?
10 A. That was the goal. It didn't always
11 happen.
12 Q. All right. But that -- is that simulation
13 practice still continued today?
14 A. Yes, it is.
15 Q. So as you design your latest graphics
16 chips, you would still typically attempt to simulate
17 them in advance of sending the tape to the -- or the
18 tapeout to the foundry?

19 A. Yes.

5. PAGE 55:19 TO 55:20 (RUNNING 00:00:05.000)

19 Q. Do you know Mark Peercy?
20 A. Yes.

6. PAGE 56:06 TO 56:24 (RUNNING 00:01:37.200)

06 Q. Were you aware of his work at SGI on the
07 Bali project?
08 A. Yeah.
09 Q. And what were you aware of?
10 A. I know that he had done some research into
11 some ideas and concepts that got incorporated into
12 the design.
13 Q. And what ideas and concepts are you aware
14 of that he did research on?
15 A. So this would be the idea of multipassing
16 data through the frame buffer.
17 Q. Okay. Was it your understanding that that
18 involved the use of floating point formatted data in
19 the multipass operation through the frame buffer?
20 A. Yes, that was my understanding.
21 Q. And did you understand that that was his
22 concept that he was working on at SGI?
23 A. I believe it was him and John Airey who --
24 together.

7. PAGE 59:25 TO 60:05 (RUNNING 00:00:12.000)

25 Q. Okay. But do you recall the use of a
00060:01 floating point frame buffer as it related to Bali?
02 A. Yes.
03 Q. And that was Dr. Peercy and Dr. Airey's
04 work?
05 A. Yeah.

8. PAGE 130:18 TO 130:20 (RUNNING 00:00:08.600)

18 Q. All right. Did you know of any other
19 floating point frame buffers that were built at
20 SGI during that time period?

9. PAGE 130:22 TO 131:02 (RUNNING 00:00:27.400)

22 THE WITNESS: So there was another project
23 going on at the same time at Bali in a different
24 division, and I don't know the internal code name
25 for that project. But it was a low end product. It
00131:01 was designed to target the $10- to $20,000 product
02 rather than the half million.

10. PAGE 131:18 TO 132:10 (RUNNING 00:00:49.700)

18 Q. Well, let me ask you this. Did you
19 actually see a second floating point frame buffer
20 design at SGI?
21 A. Well, my recollection was that this other
22 project also had a floating point frame buffer.
23 Q. And why do you recall that? What do you
24 recall about it?
25 A. Just that the work that Airey and Peercy
00132:01 were doing was the -- it wasn't just specific to
02 Bali. It was a direction for SGI.
03 Q. Okay. So this other work was an extension
04 of Airey and Peercy's work --
05 A. Yeah.
06 Q. -- in a different direction?
07 A. Yeah.

08 Q. Okay. Any other floating point frame
09 buffer you were aware of at SGI?
10 A. No.

Loh, Danny (Vol. 01) - 11/09/2007

1 CLIP (RUNNING 00:07:23.900)

DANNY LOH, ...

DL-* 8 SEGMENTS (RUNNING 00:07:23.900)

1. PAGE 7:06 TO 7:13 (RUNNING 00:00:12.200)

06 DANNY LOH,
07 The deponent herein, was sworn and
08 testified as follows:
09
10 EXAMINATION
11 BY MR. BOLLINGER:
12 Q. Good morning, Mr. Loh. How are you?
13 A. Good.

2. PAGE 8:02 TO 8:11 (RUNNING 00:00:30.700)

02 Q. Is there -- can you give me your current
03 address.
04 A. 910 Continental Drive, Menlo Park.
05 Q. All right. Are you currently employed?
06 A. Yes.
07 Q. And who do you work for?
08 A. I work for Adobe System.
09 Q. All right. And how long have you worked
10 for Adobe System?
11 A. Since early February of this year so...

3. PAGE 32:09 TO 32:20 (RUNNING 00:00:42.600)

09 And what project did you work on when
10 you came back to work with Dan the second time at
11 Silicon Graphics?
12 A. It was on a project code name Bali.
13 Q. Okay. And what did he ask you to help on
14 the Bali project?
15 A. I had two roles: One is software
16 engineering manager; and the second role was I
17 was an IPPD, which stands for Integrated Product
18 something -- Product -- Process -- Integrated
19 Product Process Development. That's right. I
20 was a software representative to the IPPD team.

4. PAGE 36:04 TO 36:11 (RUNNING 00:00:39.900)

04 Q. Well, what aspects of the technology were
05 you responsible for as a manager?
06 A. I see. So the software group has two
07 responsibilities in the development of Bali: One --
08 and it depends on different phases in the project.
09 So the early phase we were actually responsible for
10 writing software simulators to simulate the graphics
11 pipeline.

5. PAGE 39:01 TO 39:18 (RUNNING 00:01:36.500)

00039:01 A. So the question you asked me before, did I
02 work with John Airey on the floating point on Bali?

Q. Right.
A. Yes.
Q. Okay. What do you remember working on?
A. So this is primary, the first time I worked for SGI, this is prior to my departure.
Q. Okay.
A. I worked on the -- let's see if I remember. Oh, I remember. So I wrote sort of the simulation framework to evaluate floating point formats in the frame buffer. Yeah.
Q. Okay. Was that to -- was that simulation to examine the use of s10e5 as a possible format?
A. Yes, that includes that.
Q. And that was -- you were doing that work with John Airey?
A. With John Airey and Mark Peercy.

6. PAGE 40:04 TO 40:17 (RUNNING 00:01:25.500)

Let me have marked as the next exhibit a document with Bates Nos. S0907786 to S0907788.
(Whereupon, Plaintiff's Exhibit 180 was marked for identification.)
BY MR. BOLLINGER:
Q. And before you get too far into the document. It's a highly confidential document. I just want to make sure that the "Danny" referenced in the very first paragraph is -- do you understand that to be you?
A. Yes.
Q. Okay. Do you remember doing this comparative test?
A. Yes.

7. PAGE 41:03 TO 41:25 (RUNNING 00:01:31.500)

Q. Okay. What do you recall about arith.c?
A. Arith.c is a software program that provides the framework to investigate precision -- extended range and precision -- extended range precision of -- let me see. It's a long time ago.
Yes. So arith.c is the framework which allows you to experiment with different types of arithmetic.
Q. Okay. In here the discussion of s10e5, what does that mean, "s10e5"? Can you describe what that nomenclature refers to?
A. Yes. That specified the representations of numbers.
Q. Okay. So what does it actually mean, though? It's a 16-bit number?
A. So here it's a 16-bit number. "S10" refer to one part of a number, and "e5" refer to the -- you know, how many bits you dedicate for each moment, how many bits you dedicate for the mantissa. Yeah.
Q. Okay. So the "10" refers to the bits dedicated to the mantissa?
A. I think so, yeah.

8. PAGE 42:01 TO 42:11 (RUNNING 00:00:45.000)

Q. What does the "s" stand for?
A. The "s" stands for assign bit.
Q. How do you designate the bias in that particular expression?
A. Yeah. Let me think about that. That's a very difficult question.

07 Q. All right. Do you recall what bias
08 you were operating on when you were doing these
09 experiments?
10 A. Yeah. We actually experimented with quite
11 a few biases.

TOTAL: 3 CLIPS FROM 3 DEPOSITIONS (RUNNING 00:21:41.200)